AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (previously presented): A cavity filter comprising:

a filter housing, said housing having at least first and second cavities separated by a cavity wall, said cavity wall running the entire length of the first and second cavities;

a filter cover for covering said filter housing; and

a plurality of resonators respectively disposed in said cavities,

wherein first and second resonators, of said plurality of resonators, are coupled to each other by both an adjustable inductive coupler and a capacitive cross-coupler.

2. (original): The cavity filter of claim 1 wherein said cavity wall has an opening therein such that said first and second cavities can communicate with each other, said opening corresponding to said inductive coupler.

3. (original) The cavity filter of claim 2 wherein said capacitive cross-coupler includes a bar that extends from said cavity wall into each of said first and second cavities.

4. (original) The cavity filter of claim 3 further comprising a tuner for adjusting the inductance of the inductive coupler.

5. (original) The cavity filter of claim 4 wherein the tuner includes an electrical conductor that extends into the opening of said cavity wall.

6. (original) The cavity filter of claim 5 wherein the extent that said electrical conductor extends into the opening is adjustable.

7. (original) The cavity filter of claim 6 wherein the electrical conductor is a screw threadedly engaged in the filter cover.

8. (original) The cavity filter of claim 6 wherein the electrical conductor is a screw threadedly engaged in the filter housing.

9. (original) The cavity filter of claim 1, wherein said inductive coupler and said capacitive cross-coupler are disposed adjacent each other.

10. (original) The cavity filter of claim 9, wherein said inductive coupler includes a notch and conductive member that extends into said notch, and wherein said capacitive cross-coupler includes a bar that extends from said cavity wall into each of said first and second cavities.

11. (original) The cavity filter of claim 10, wherein said bar is provided in an insulating collar which is removably fixed to said cavity wall.

12. (original) The cavity filter of claim 1, further comprising third and fourth resonators respectively provided in third and fourth cavities, said third and fourth resonators being adjacent each other and inductively coupled to each other.

13. (currently amended) A method of tuning the frequency response of the bandwidth of a cavity filter that includes a filter housing, a filter cover for covering said filter housing, a plurality of resonators respectively disposed in cavities, including a first and second resonator respectively disposed in first and second cavities, a cavity wall running the entire length of the first and second cavities and disposed between said first and second resonators, an inductive coupler that includes a tuner, and a capacitive cross-coupler; said method comprising:

adjusting the ~~capacitive~~ cross-coupling effect between said first and second resonators by adjusting the inductive coupler.

14. (original) The method of tuning the frequency response of the bandwidth of a cavity filter of claim 13, wherein the step of adjusting the inductive coupler comprises tuning the tuner accessible from the exterior of the cavity filter.

15. (original) The method of tuning the frequency response of the bandwidth of a cavity filter of claim 14, wherein the step of adjusting the tuner comprises altering the position of a screw engaged in the filter cover.

16. (original) The method of fine tuning the frequency response of the bandwidth of a cavity filter of claim 14, wherein the step of adjusting the fine tuner comprises turning a screw threadedly engaged in the filter housing.

17. (previously presented) A method of tuning the frequency response of the bandwidth of a cavity filter that includes a filter housing with a plurality of resonators disposed in cavities, a first and second of said plurality of resonators separated by a cavity wall running the entire length of the first and second cavities, comprising the step of adjusting the capacitive cross-coupling effect between said resonators by externally adjusting the inductive coupling.

18. (canceled).